

CLAIMS

1. A microchip comprising a base material in which a channel is provided, the microchip extracting a sample from a complex of said sample and a carrier holding said sample being introduced into said channel,

5 wherein said channel includes:

an inlet through which said complex is introduced;

a damming portion which stems said complex;

an introduction channel which is provided from said inlet to said damming portion, said complex flowing through said

10 introduction channel; and

a sample channel which is located on a downstream side of said damming portion, said sample channel being communicated with said introduction channel through said damming portion, said sample flowing through said sample channel, said sample being extracted

15 from said complex stemmed at said damming portion.

2. The microchip according to claim 1, comprising stimulus applying unit applying stimulus to said complex to extract said sample, said complex being stemmed at said damming portion.

3. The microchip according to claims 1 or 2, wherein said damming portion has a plurality of protrusions.

4. The microchip according to claims 2 or 3, wherein said stimulus applying unit is a heating member.

5. The microchip according to claims 2 or 3, wherein said stimulus applying unit is a light irradiation member.

6. The microchip as in any one of claims 1 to 5, wherein said channel has a separation portion which separates a component in said sample.

7. The microchip as in any one of claims 1 to 6, wherein said channel has an analysis portion which analyzes said sample.

8. The microchip as in any one of claims 1 to 7, wherein said channel has a recovery portion which recovers said sample.

9. A method of extracting a sample, wherein a microchip comprising a base material in which a channel is provided is used to introduce a complex of a sample and a carrier holding said sample into said channel, and

5 said sample is extracted from said complex by applying stimulus to said complex.

10. A method of separating a sample, wherein, after said sample is extracted from the complex by the method of extracting a sample according to claim 9, a component in said sample extracted is separated on a downstream side of said channel.

11. The method of separating a sample according to claim 10,

wherein said stimulus is applied to said complex by heating said complex.

12. The method of separating a sample according to claim 10, wherein said stimulus is applied to said complex by changing pH in said channel.

13. The method of separating a sample according to claim 10, wherein said stimulus is applied to said complex by diluting a concentration of said carrier.

14. The method of separating a sample as in any one of claims 10 to 13, wherein said stimulus is applied after said complex is stemmed at a predetermined position in said channel.

15. The method of separating a sample according to claim 14, wherein said complex is stemmed by keeping said complex at said predetermined position by remote operation.

16. The method of separating a sample according to claim 15, wherein said remote operation is a laser trap.

17. A method of analyzing a sample, wherein after said sample is extracted from the complex by the method of extracting a sample according to claim 9, said sample extracted is analyzed on a downstream side of said channel.

18. The method of analyzing a sample according to claim 17, wherein said stimulus is applied to said complex by heating said complex.

19. The method of analyzing a sample according to claim 17, wherein said stimulus is applied to said complex by changing pH in said channel.

20. The method of analyzing a sample according to claim 17, wherein said stimulus is applied to said complex by diluting a concentration of said carrier.

21. The method of analyzing a sample as in any one of claims 17 to 20, wherein said stimulus is applied after said complex is stemmed at a predetermined position in said channel.

22. The method of analyzing a sample according to claim 21, wherein said complex is stemmed by keeping said complex at said predetermined position by remote operation.

23. The method of analyzing a sample according to claim 22, wherein said remote operation is a laser trap.

24. A method of recovering a sample, wherein after said sample is extracted from the complex by the method of extracting a sample according to claim 9, said sample extracted is recovered on a downstream side of said channel.

25. The method of recovering a sample according to claim 24, wherein said stimulus is applied to said complex by heating said complex.

26. The method of recovering a sample according to claim 24, wherein said stimulus is applied to said complex by changing pH in said channel.

27. The method of recovering a sample according to claim 24, wherein said stimulus is applied to said complex by diluting a concentration of said carrier.

28. The method of recovering a sample as in any one of claims 24 to 27, wherein said stimulus is applied after said complex is stemmed at a predetermined position in said channel.

29. The method of recovering a sample according to claim 28, wherein said complex is stemmed by keeping said complex at said predetermined position by remote operation.

30. The method of recovering a sample according to claim 29, wherein said remote operation is a laser trap.